

In The Matter Before the
Federal Communications Commission
And The Wireless Telecommunications Bureau:

Reply Comments on Request To Re-Open The
Petition For Rule Making Regarding
Hearing Aid-Compatible Telephones
DA 00-2402
Rulemaking 8658

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In reviewing all of the HAC Comments filed on December 8, 2000, I respectfully submit the following response.

Allow me the courtesy of giving some background information publicly.

In reading the initial Comments filed, the status of the industry is readily apparent. I am very disturbed at the current reality of Hearing Access avenues and choices available to millions and millions of American's with hearing loss....rather the lack thereof.

Those of you who know me, know of my passion for access; for the full participation in society by people with disabilities; and in utilizing any and all technological avenues that guarantee inclusion into everyday living. We must mainstream America....not just the schools.

Some of you may know that I have been absent on the national level for a period of two and one half years. Suffice it to say, that I lived through the three months on life support...and the resulting long rehabilitation....and, that I am alive and now well.

What appears **not to be alive and well** is all the tasks that were accepted by and committed to, by the major telecom players and organizations in the Industry Communications Plan that was presented to the FCC prior to my illness. It was my understanding that FCC accepted this Industry Communications Plan as an **action plan** from the Telecommunications Industry Players!

I presume this is readily available from FCC to anyone who would wish to view its contents or perhaps to have their memory refreshed as to their commitments to the population of people with disabilities, including those with hearing loss.

This Plan was the result of the short-term solutions (one of the three) subcommittee(s) that resulted from the referenced Hearing Aid Compatibility and Accessibility to Digital Wireless Telecommunications Summit convened in January of 1996. I personally played a large role in creating the Communications Plan and on the Short Term Solutions Sub-Committee, to even crossing over to all the Chair and Co-Chairpersons and their respective subcommittees in providing information and documentation regarding Americans with Disabilities, Americans with Hearing Loss, telecommunication problems surrounding hearing aid usage and GSM, TDMA, CDMA, PCS, and of course....Analog hearing aid interference signatures, and the small...small number of hearing access solutions available worldwide to people with all levels of hearing loss, to giving recommendations to the wireless OEM's on simple access solutions to their products for different disabilities, to giving information to FCC on the difference in the actual tangible performance between volume control, neck loops, and HAC and their real impact per the different levels of hearing loss and who can benefit and who can not from these technologies, communication avenues to the consumer with disabilities....and of course, on numerous other points within this entire arena. The reality is that I have been heavily involved in this entire arena since 1990 with the telecom industry and its players.

Thus, to state that I do know the history surrounding this issue...is certainly an understatement. To state that progress has been made in the past two and one half years regarding honoring industry commitment, resulting in ready access for people with hearing disabilities in America.....is not an understatement. It is unfortunately a lie.

The only progress has been in wireless industry profit overall, not in the avenues of their products and services being "accessible to and usable by" people with disabilities....and certainly not in communicating to the consumer what is available, what benefits whom, or even where to try out or even find out information about what little does exist.

Even the new FCC Consumer Booklet on Cellular phones and services fails to even mention the issue of hearing access, let alone hearing aid interference. This booklet is even available on the FCC website for viewing, yet nothing is stated on any of this.

The filed Comments certainly and clearly reflect that hearing aid access to all types of wireless phones is **still** not a reality today.

Trust me...I do know this first hand, as I am a hearing aid wearer and a person who is deaf. A friend has a new NOKIA 6160 wireless phone. I can be up to 9 feet away from her, and I still have my hearing aid, **a Class III Medical Device rendered totally inoperable due to the buzzing interference from the NOKIA phones while my hearing aid is on normal audio operation!!**

The NEXTEL phone was even worse...I had to get almost 16 feet away from that phone to get my hearing aid back into operation.

I have also tried the Motorola HAC wireless phone when they brought that to market....and on T-Coil operation I have complete buzzing interference when the phone is placed next to my ear/hearing aid. This information was communicated to Motorola at that time as well.

I seem to remember telling NOKIA years ago, their phones had a severe problem with hearing aid interference. NOKIA's solution? They created a neck loop....they figured that would solve A LOT of their problems! Did it? NO. Why? The NOKIA 6160 (6000 Series) phone interferes with a hearing aid whether it is on normal audio operation or it is on T-coil operation and it comes within 6 to 7 inches of the hearing aid. Another interesting point is that I received an email response from NOKIA telling me that none of their phones or products (including their neck loop) are accessible to a 2.5mm earphone jack nor do they have an adapter with a 2.5mm jack. Thus, if one has a system that works for them that needs the 2.5mm jack in order to access the telephone in the first place....don't look at the NOKIA brand. The 2.5mm jack needs to be mandated...but that should be part of the investigation into this entire issue.

NOKIA sends a strong message...makes me wonder if the only people hearing that message are people with hearing loss!

So...how effective are neck loops with the NOKIA phones? Not very. An added point on neck loops.....they only benefit people with mild to moderate hearing loss....that has been verified time and time again by many audiologists. Now I understand that several wireless telephone manufacturers are making their own neck loop systems....this does not solve the problem of hearing access. It does afford another choice. But...one more time...it only works for people with mild to

moderate hearing loss...and only if the hearing aid is **not** of the power level that ends up with the buzzing interference from the wireless phone!

That same opinion is held in regards to just about every hearing access solution, again this is the professional opinion of numerous audiologists from several different states:

Current available hearing access choices that work only for mild to moderate hearing loss levels:

Volume Control
Dual Volume Control
Hearing Aid Compatible Handsets
Neck Loops

Current hearing access choices that work for moderate to profound hearing loss levels:

TTY

Do we need more choices.....you bet we do! Obviously, the best technology choices involve those whose design is universal so that people with and people without disabilities can use the same product.

The true bottom line is that the FCC should indeed grant the Request to Re-Open The Petition For Rule Making Regarding Hearing Aid Compatible Telephones.

Rather than deny the filed request for waiver of compliance by the wireless industry, FCC should look at the reality.

This is the reality facing people with hearing loss who wear hearing aids:

Section 255 was crafted with the purpose of guaranteeing access to telecommunications and communications...Access was to be guaranteed by choices, meaning the individual with hearing loss or other disability, made the decision on what technology worked the best in meeting their personal needs regarding the functional limitation of their disability.

5 Years after we originally started the whole process under 255...a person with a hearing aid still cannot "test drive" a wireless phone with their choice of hearing access solution. We still cannot be within 9 to 15 feet of a lot of wireless phones due to hearing aid interference. We still cannot use a wireless phone with a hearing aid on T-coil operation if the phone is closer than 6 inches to the hearing

aid. Even if we could place the wireless phone to the hearing aid, (given that the interference issues were addressed) only 10% of the population of people with hearing loss/aids, those with mild to moderate hearing loss could benefit from all of the current marketed hearing access solutions....(including HAC) and only if their hearing aid was of the power that they did not end up with hearing aid interference. Everyone with more than mild to moderate loss would still have the same ONE CHOICE....TTY.

We still cannot go to a wireless store, or to a department store, or even to a telecom website to get accurate and specific choice information, let alone try our choice of hearing access solution, with the wireless phone of our choice, or to have any indication of what hearing access solution is recommended for what level of hearing loss. Our chances of even finding a sales person who has any knowledge of hearing aid or hearing access issues/solutions are slim. We cannot participate in the advertised service/network packages of a wireless phone and service, or even the "Free Phone" give away when you sign up for wireless service! No "One Stop Shopping" is open to us...rather this one is my favorite: **We are given a telephone number to call to inquire or complain about lack of hearing access to a telephone product.**

We also do not have the comfort of knowing that our audiologists or hearing aid dispensers are going to educate the majority of us on T-coils and their usage and benefits....let alone recommend what hearing access choices work the best for which hearing loss level!

All that was just mentioned was committed to being done in the Industry Communication Plan for FCC.

Many of you have heard my quote a thousand times, but it still bears repeating. "Access Delayed is Access Denied." We have the laws, we even have the enforcement arm...we do not have access to telecommunications in the wireline or the wireless reality.

In taking this issue further, the shielding issue for the wireless phones and hearing aids has long been a sore spot for both industries.

Here is that reality:

Can you shield the wireless phone to the point of eliminating hearing aid interference? No. Can you reduce it and benefit millions? Yes.

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Can you wrap a hearing aid in aluminum foil and reduce the hearing aid interference...yes, you can, I showed that almost 9 years ago. You can also spray the inside of the hearing aid casing with silver metallic spray paint...will it shield it completely? NO. Why? Because you have the tube for the earmold, or you have the earmold opening, then you have the volume control or perhaps the switch opening, then you have the battery opening....so you cannot seal the aid off completely to eliminate the interference.

If shielding were done completely on both the phone and the hearing aid, would it eliminate hearing aid interference? NO.

Studies have long proven that to effectively use a wireless telephone, one must have distance between the hearing aid and the wireless telephone. It also shows that the power of the aid will determine whether even a hearing aid used by a person with a moderate hearing loss will experience the buzzing interference when trying to use a HAC wireless telephone! This is one of the top reasons that the whole peripheral device section was added to Section 255, to ensure that either directly or through a peripheral device...access could be created for telecommunications and communications usage.

Another point that must be looked at, is one I have brought up numerous times to industry representatives, to the scientists, to the telecom organizations, to April Laboratories...."If a wireless phone has such great electromagnetic emissions (EMI's) that it interferes with the hearing aid....then does this turn people with hearing aids into walking antenna's, thus becoming the primary receiver of EMI's as so evidenced by the buzzing or whistling interference signatures from ALL wireless phones (remember analog phones interfere too)? I have yet to have anyone look at this with any degree of concern. Even with all the health issues and wireless phone usage that has come to light no one has really stopped to think about this. If ever anyone should be commissioned to examine this, it is Dr. Jack Wojcik of April Laboratories. He has the knowledge and experience in both disciplines to know how to explore this.

As you can see by the above issues that I have raised, that many avenues must still be explored and must be taken under consideration if people with hearing loss are to be able to truly access wireless telecommunications, and for that matter, wireline telecommunications.....and to be able to participate in the Wireless Revolution that our country is so truly in the midst of. Technology is evolving at such a rate that a wireless phone, is now a personal messaging center...we have WAP, we have internet/computer access, email, etc. all available through a wireless telephone, and the tools exist to access the world. And that world will get smaller, as the world becomes even more connected and in so many different ways. When one of the top cellular industry organizations

merges with one of the top computer/network industry organizations....then that bottom line is a global merging of technology, products, and services.

Now, those of us with hearing loss need our tools. Do not let the current Digital Divide become a Global Divide. Re-Open the Petition, Stay the action and Open the full realm of investigation to ensure hearing access and to explore the new technology that can secure hearing access by ALL people with hearing loss.

The FCC owes these actions to All People, including those without disabilities. You are tasked as the enforcement arm.

The Telecom Industry owes this to All your customers. After all, they are OUR family members, our friends, our health care providers, our community representatives....they are the people we would call and who would call us. People with disabilities and the elderly control 60 per cent of the disposable income in this nation....yet, we cannot access or use your products and services.

We, people with disabilities owe the continuing fight for full telecommunications and communications/network access to the children of today, and the children of tomorrow. Then, perhaps they will not have to live as spectators in our society...but will live as full participants in their society, their community, and in their world.

If any of us elect not to be responsible in this, the future shall hold us accountable.